



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,485	12/30/2003	Jon Arthur Roepke	135405-1	8742

52082 7590 09/16/2011  
General Electric Company  
GE Global Patent Operation  
2 Corporate Drive, Suite 648  
Shelton, CT 06484

EXAMINER
----------

RIGGLEMAN, JASON PAUL

ART UNIT	PAPER NUMBER
----------	--------------

1711

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

09/16/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gpo.mail@ge.com  
allyson.carnaroli@ge.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/748,485	<b>Applicant(s)</b> ROEPKE ET AL.	
	<b>Examiner</b> JASON RIGGLEMAN	<b>Art Unit</b> 1711	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 1,4-7,10-12,25,27-30 and 32-34 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1,4-7,10-12,25,27-30 and 32-34 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/18/2011 has been entered.

### ***Status of Claims***

2. Applicant's request for reconsideration, filed 7/14/2011, is acknowledged. Current pending claims, as submitted 8/18/2011, are 1, 4-7, 10-12, 25, 27-30 and 32-34. Claims 2-3, 8-9, 13-24, 26, and 31 are cancelled. Claims 1, 4, 7, 10, and 25 are amended.

### ***Response to Amendment***

3. The previous rejection under 35 U.S.C. 112, first paragraph of claims 1, 3-7, 9-12, 25-30 and 32-34 is withdrawn in view of the amendment to the claims. Applicant's arguments with respect to claims 1, 4-7, 10-12, 25, 27-30 and 32-34 have been considered but are moot in view of the new ground(s) of rejection (necessitated by amendment).

### ***Remarks***

4. For purposes of examination, "top cover" in claim 1 is assumed to be the top cover 54 of the washing machine described in the applicant's specification, paragraph [0022], Fig. 3. This assumption was confirmed as correct in the applicant's reply filed on 3/19/2007.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4-7, 10-12, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Je (Korean Publication No. KR2003055965) in view of Huttemann (UK Patent Application Publication No. GB4043158) and further in view of Komatsu et al. (JP Patent Publication No. JP08-206390) and Hayde et al. (EP Patent Application No. EP0252817A1).

7. Je teaches an additive dispensing system for a washing machine 1 including a tub 5, for holding wash liquid, and a basket 6, for holding articles to be washed. The additive dispensing system includes a top cover 30. A reservoir 40 is removably coupled to the top cover 30 and is configured to contain an additive, Fig. 2. A plurality of tabs 37 extend from the top cover 30, Fig. 4. The plurality of tabs engage a top cover 20 of the washing machine 1 to couple the reservoir cover 30 to the top cover 20. An opening 33 is present in the reservoir cover 30 and an opening is present the top cover 20, Fig. 3 which remains after assembly of the two components. An annular space is defined between the tub and basket, Fig. 1. The reservoir is emptied by a siphon tube (siphon pipe 43). The reservoir includes a removable cover coupled the top cover 20 and the conduit comprises a siphon -- siphon cap 50 and siphon pipe 43, Fig. 8. The reservoir includes an overflow port 48. The top cover includes an opening there through, with the opening in fluid communication with said reservoir for introducing the additive into said reservoir. The siphon tube empties through the pass station 65 and through a through-hole 68 to be dropped into

Art Unit: 1711

the intervening space of the washing tub and water tank (English Machine translation of Je (Korean Publication No. KR2003055965). The water supply mouths (49, 49)' supply the water to the reservoir (and hence diluted additive to the basket) at a predetermined time, pgs. 3-4, of KIPO machine translation of KR2003055965. The cover is removably coupled by snap-fit engagement to an upper said of the top cover, Figs. 4 & 9.

8. Je does not teach a controller configured to control a water valve and that the valve dispenses during a selected wash of a plurality of wash cycles; however, it has been held that an obvious choice in design is not patentable (*In re Kuhle*, 188 USPQ 7). Je teaches that the water is added at a predetermined time set up by the user. The supplying of the water to the dispenser causes the diluted additive to be added to the basket. When water is provided, when combined the siphoning phenomenon would occur to flush the chamber. It would be obvious (if not inherent) to utilize valves to control the water flow and a controller to control the timing of the operation of the valves to correspond to multiple wash cycles. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Je to create a washing machine with a programmed control of additive dispensing to achieve the expected result. Note: support for the pervasiveness and obvious of the use of programmable controllers is provided by Tessarolo (UK Patent Application GB2001454) which teaches a controller which operates electrical valves (Line 124). Further, Huttemann (UK Patent Application Publication No. GB4043158) teaches a washing machine controller in which the valve is controlled to open/shut at predetermined times to supply water to a detergent box (see entire document). The water is necessarily provided, when combined with Je, such that the siphoning phenomenon would occur to flush the chamber.

Art Unit: 1711

9. Je, as modified above, as modified by Huttemann, does not teach a siphon *fitting* coupled to the removable (reservoir) cover; however, it has been held that an making elements integral would have been obvious (*In re Wolfe* 116 USPQ 443). Additionally, Komatsu et al. teaches a reservoir cover (57) removably coupled to a reservoir and having an upper siphon fitting (60) integrated into the cover, Fig. 1.. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Je, as modified above as modified by Huttemann, to make the siphon caps integral with the removable cover to achieve the expected result of stably positioning of the siphon caps on top of the siphon pipes.

10. Je, as modified above as modified by Huttemann, as modified by Komatsu et al. does not teach the user adjustment during the wash cycle; however, Hayde et al. (EP Patent Application No. EP0252817A1) teaches a washing machine having a means in which in a first scenario the wash cycle length is automatically controlled. In a second scenario the user intervenes and adjusts the cycle length which is communicated to the controller. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Je, as modified above as modified by Huttemann, as modified by Komatsu et al. to have a means to manually override the automatic controls to provide greater control over the wash process or a system which is response to a user input to change the washing cycle length – and subsequently the dispense time is automatically adjusted by the controller.

11. Claims 27-30 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Je (Korean Publication No. KR2003055965) in view of Huttemann (UK Patent Application Publication No. GB4043158) in view of Heyde et al. (EP Patent Application No. EP0252817A1) in view of Bochan (US Patent No. 3727434).

Art Unit: 1711

**12.** Je teaches an additive dispensing system for a washing machine 1 including a tub 5, for holding wash liquid, and a basket 6, for holding articles to be washed. The additive dispensing system includes a top cover 30. A reservoir 40 is removably coupled to the top cover 30 and is configured to contain an additive, Fig. 2. A plurality of tabs 37 extend from the top cover 30, Fig. 4. The plurality of tabs engage a top cover 20 of the washing machine 1 to couple the reservoir cover 30 to the top cover 20. An opening 33 is present in the reservoir cover 30 and an opening is present the top cover 20, Fig. 3 which remains after assembly of the two components. An annular space is defined between the tub and basket, Fig. 1. The reservoir is emptied by a siphon tube (siphon pipe 43). The reservoir includes a removable cover coupled the top cover 20 and the conduit comprises a siphon -- siphon cap 50 and siphon pipe 43, Fig. 8. The reservoir includes an overflow port 48. The top cover includes an opening there through, with the opening in fluid communication with said reservoir for introducing the additive into said reservoir. The siphon tube empties through the pass station 65 and through a through-hole 68 to be dropped into the intervening space of the washing tub and water tank (English Machine translation of Je (Korean Publication No. KR2003055965). The water supply mouths (49, 49)' supply the water to the reservoir (and hence diluted additive to the basket) at a predetermined time, pgs. 3-4, of KIPO machine translation of KR2003055965. The cover is removably coupled by snap-fit engagement to an upper said of the top cover, Figs. 4 & 9.

**13.** Je does not teach a controller configured to control a water valve and that the valve dispenses during a selected wash of a plurality of wash cycles; however, it has been held that an obvious choice in design is not patentable (*In re Kuhle*, 188 USPQ 7). Je teaches that the water is added at a predetermined time set up by the user. The supplying of the water to the dispenser

Art Unit: 1711

causes the diluted additive to be added to the basket. When water is provided, when combined the siphoning phenomenon would occur to flush the chamber. It would be obvious (if not inherent) to utilize valves to control the water flow and a controller to control the timing of the operation of the valves to correspond to multiple wash cycles. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Je to create a washing machine with a programmed control of additive dispensing to achieve the expected result. Note: support for the pervasiveness and obvious of the use of programmable controllers is provided by Tessarolo (UK Patent Application GB2001454) which teaches a controller which operates electrical valves (Line 124). Further, Huttemann (UK Patent Application Publication No. GB4043158) teaches a washing machine controller in which the valve is controlled to open/shut at predetermined times to supply water to a detergent box (see entire document). The water is necessarily provided, when combined with Je, such that the siphoning phenomenon would occur to flush the chamber.

14. Je, as modified above, as modified by Huttemann, does not teach a siphon *fitting* coupled to the removable (reservoir) cover; however, it has been held that an making elements integral would have been obvious (*In re Wolfe* 116 USPQ 443). Additionally, Komatsu et al. teaches a reservoir cover (57) removably coupled to a reservoir and having an upper siphon fitting (60) integrated into the cover, Fig. 1.. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Je, as modified above as modified by Huttemann, to make the siphon caps integral with the removable cover to achieve the expected result of stably positioning of the siphon caps on top of the siphon pipes.



Art Unit: 1711

15. Je, as modified above as modified by Huttemann, as modified by Komatsu et al. does not teach the user adjustment during the wash cycle; however, Hayde et al. (EP Patent Application No. EP0252817A1) teaches a washing machine having a means in which in a first scenario the wash cycle length is automatically controlled. In a second scenario the user intervenes and adjusts the cycle length which is communicated to the controller. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Je, as modified above as modified by Huttemann, as modified by Komatsu et al. to have a means to manually override the automatic controls to provide greater control over the wash process or a system which is responsive to a user input to change the washing cycle length – and subsequently the dispense time is automatically adjusted by the controller.

16. Je as modified by Huttemann as modified by Komatsu et al., as modified by Hayde et al. does not teach the controller calculation of a dispense time, monitoring an elapsed wash cycle time, comparing the elapsed wash cycle time with a calculated dispense time and dispensing the additive when the calculated dispense time; however, Bochan teaches the addition of various wash additives during the wash cycle (Column 5, Lines 60-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Je as modified by Huttemann as modified by Komatsu et al., as modified by Hayde et al. to have a system in which the additive delivery is controlled to a higher extent to achieve the expected result. Note: it should be understood that the claims read on a conventional dispenser which dispenses a detergent at a beginning of a wash cycle. The additive that is added during the wash cycle appears to be directed towards a fabric softener; bleach; or stain remover type composition. The device of Bochan appears to flush the dispenser regardless of an additive being present. The

Art Unit: 1711

dispense time is proportional to the total wash cycle since the bleach is always intermediate the cycle.

*Conclusion*

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON RIGGLEMAN whose telephone number is (571)272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/  
Supervisory Patent Examiner, Art Unit 1711

Jason P Riggleman  
Examiner  
Art Unit 1711

/J. R./  
Examiner, Art Unit 1711